AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method for evaluating the operation of an alternator driven by a motor, comprising the steps of:

detecting a motor speed or an alternator speed;

coupling a load to the alternator upon the motor speed or the alternator speed reaching a predetermined level; and

detecting characteristics of an alternator output signal representative of an alternator characteristic after the load has been coupled to the alternator for a first predetermined period of time, wherein the first predetermined period of time is fixed, and is chosen such that effects of noise caused by the step of coupling the load are reduced ~~the detected alternator output signal is stable~~.

2. (Original) The method of claim 1, wherein the motor is the engine of a vehicle.

3. (Previously Presented) The method of claim 1, wherein the load is a Nichrome coil.

4. (Currently Amended) A method for evaluating the operation of an alternator, comprising the steps of:

coupling a load to the alternator; and

detecting characteristics of an alternator output signal representative of an output of the alternator only after the load has been coupled to the alternator for a first predetermined period of time, wherein the first predetermined period of time is fixed, and is chosen such that effects of

noise caused by the step of coupling the load are reduced ~~the detected alternator output signal is stable~~.

5. (Previously presented) The method of claim 4, further including a step of decoupling the load from the alternator after the load has been coupled to the alternator for a second predetermined period of time greater than the first predetermined period of time.

6. (Currently Amended) A system for evaluating the operation of an alternator driven by a motor, comprising:

a load;

a terminal for receiving an alternator output signal representative of an alternator characteristic;

a sensor for generating a speed signal representative of a motor speed or an alternator speed;

a switch device for selectively coupling the load to the alternator; and

a controller, coupled to the sensor, the terminal and the switch device, for determining characteristics of the alternator output signal and for controlling operation of the switch device;

wherein, in response to the speed signal indicating the motor speed or the alternator speed reaching a predetermined level, the controller automatically generates a first switch operation signal to control the switch device to couple the load to the alternator, and

the controller determines characteristics of the alternator output signal based on parameters collected after the load has been coupled to the alternator for a first predetermined period of time, wherein the first predetermined period of time is fixed, and is chosen such that

effects of noise caused by the step of coupling the load are reduced ~~the alternator output signal received by the system is stable~~.

7. (Original) The system of claim 6, wherein the load is a Nichrome coil.

8. (Original) The system of claim 6, further comprising a cooling device for dissipating the heat generated by the load.

9. (Original) The system of claim 8, wherein the cooling device is a fan.

10. (Original) The system of claim 6, wherein the system is contained within a housing of the size suitable to be hand held.

11. (Original) The system of claim 6, wherein the load is constructed to draw at least 50 amperes of current from the alternator.

12. (Original) The system of claim 6, wherein the controller generates a second switch operation signal to control the switch device to decouple the load from the alternator after the load has been coupled to the alternator for a second predetermined period of time.

13. (Currently Amended) A system for evaluating the operation of an alternator, comprising:

a load;

a terminal for receiving an alternator output signal representative of an alternator characteristic;

a switch device for selectively coupling the load to the alternator; and

a controller, coupled to the switch device and the terminal, for determining characteristics of the alternator output signal and for generating a first switch operation signal to control the switch device to couple the load to the alternator; and

wherein the controller determines the characteristics of the alternator output signal based on parameters collected only after the load has been coupled to the alternator for a first predetermined period of time; and

wherein the first predetermined period of time is fixed, and is chosen such that effects of noise caused by the step of coupling the load are reduced ~~the alternator output signal received by the system is stable~~.

14. (Original) The system of claim 13, wherein the controller generates a second switch operation signal to control the switch device to decouple the load from the alternator after the load has been coupled to the alternator for a second predetermined period of time.

15. (Original) The system of claim 13, wherein the alternator is used in an automotive vehicle to charge a battery.

16. (Currently Amended) A method for evaluating the operation of an alternator, comprising the steps of:

coupling a load to the alternator; and

evaluating the operation of the alternator based on parameters collected after the load being coupled to the alternator for a first predetermined period of time, wherein the first predetermined period of time is fixed, and is chosen such that effects of noise caused by the step of coupling the load are reduced ~~the collected parameters are stable~~.

Claims 17-22 (Cancelled)

23. (Original) A system of claim 13, wherein the terminal receives the alternator output signal through a wireless link.

24. (Original) A system of claim 23, wherein the wireless link is an infrared wireless link.

25. (Original) A system of claim 23, wherein the wireless link is a radio wave wireless link.

26. (Currently Amended) A method for evaluating the operation of an alternator driven by a motor, comprising the machine-implemented steps of:

detecting a motor speed or an alternator speed;

coupling a load to the alternator upon the motor speed or the alternator speed reaching a predetermined level; and

detecting characteristics of an alternator output signal representative of an alternator characteristic after the load has been coupled to the alternator for a first predetermined period of

time, wherein the first predetermined period of time is fixed, and is chosen such that effects of noise caused by the step of coupling the load are reduced ~~the detected alternator output signal is stable~~.

27. (Currently Amended) A system for evaluating the operation of an alternator driven by a motor, comprising:

a load;

terminal means for receiving an alternator output signal representative of an alternator characteristic;

sensor means for generating a speed signal representative of a motor speed or an alternator speed;

switch means for selectively coupling the load to the alternator;

control means, coupled to the sensor means, the terminal means and the switch means, for determining characteristics of the alternator output signal and for controlling operation of the switch means;

wherein, in response to the speed signal indicating the motor speed or the alternator speed reaching a predetermined level, the control means automatically generates a first switch operation signal to control the switch means to couple the load to the alternator, and

the control means determines characteristics of the alternator output signal based on parameters collected after the load has been coupled to the alternator for a first predetermined period of time, wherein the first predetermined period of time is fixed, and is chosen such that effects of noise caused by the step of coupling the load are reduced ~~the alternator output signal received by the system is stable~~.

28. (Previously Presented) The system of claim 27, wherein the controller generates a second switch operation signal to control the switch means to decouple the load from the alternator after the load has been coupled to the alternator for a second predetermined period of time.

29. (Previously Presented) The system of claim 13, further comprising a housing including:

a first compartment for receiving a circuit board including the controller mounted thereon;

a second compartment for housing the load;

an air inlet disposed on one side of the second compartment;

a fan forming an air outlet on the other side of the second compartment; and

wherein the load, the air inlet and the fan are substantially in line,

the air inlet and the fan form an air flow path, when the fan is in operation, the heat generated by the load is dissipated to the surrounding air and drawn out through the air outlet, and the housing has a size suitable to be held in one's hand.

30. (New) The method of claim 5, wherein the second predetermined period of time is one second.

31. (New) The system of claim 12, wherein the second predetermined period of time is one second.

32. (New) The system of claim 14, wherein the second predetermined period of time is one second.

33. (New) The system of claim 28, wherein the second predetermined period of time is one second.